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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/704,202	11/01/2000	Cheong-Jeong Seo	5000-1-136	4666

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EXAMINER

VU, NGOC K

ART UNIT	PAPER NUMBER
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2611

DATE MAILED: 09/10/2004

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

09/704,202

Applicant(s)

SEO, CHEONG-JEONG

Examiner

Ngoc K. Vu

Art Unit

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
 - If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
 - If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
 - Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☐ Responsive to communication(s) filed on ____.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-20 is/are pending in the application.
- 4a) Of the above claim(s) ____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) ____ is/are allowed.
- 6) ☒ Claim(s) 1-20 is/are rejected.
- 7) ☐ Claim(s) ____ is/are objected to.
- 8) ☐ Claim(s) ____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on ____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
- Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. ____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892) *
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☒ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date 20010927.
- 4) ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date. ____.
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: ____.

DETAILED ACTION

Claim Rejections - 35 USC § 112

1. The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

2. Claims 1-20 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

Claim 1 is indefinite because there are no antecedent basis for the limitations "the data requested by at least one user" in line 5, and "the server" in lines 6-7.

Claim 3 recites the limitation "the base station is a portion of the exchange means which is remote from a remainder of the exchange means". It is unclear what "a remainder of the exchange means" referred to.

Claim 8 is indefinite because there is no antecedent basis for the limitation "the exchange" in line 2.

Claims 15 and 16 are indefinite because there is no antecedent basis for the limitation "the VOD system" in line 2.

Claim Rejections - 35 USC § 103

3. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

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4. Claims 1-20 are rejected under 35 U.S.C. 103(a) as being unpatentable over Nishio et al. (US 5,557,317 A) in view of Robbins et al. (US 5,784,095 A) and further in view of Jackson (US 6,516,466 B1).

Regarding **claim 1**, Nishio discloses a video-on-demand system comprising:

a server means (130) for providing data comprising video/audio programs to at least one user (see col. 3, lines 47-48 and figure 1);

a server manager (140) for managing the transmission of the video/audio programs of the data requested by at least one user (for example, video gateway 11 of video management center 140 is responsive to a service request signal from the system subscriber for accessing the database 12 – see col. 3, lines 17-33 and 47-48; col. 4, lines 52-54 and figure 1);

an exchanged means (110) for converting the video/audio programs from the server (41) through a network (42) to provide video/audio programs for transmission of the requested data (see col. 3, lines 47-53); and

a terminal means (120) for receiving the video/audio programs from the exchanged means, and outputting only the requested data comprising the video/audio programs to the at least one user (see col. 4, lines 8-15).

Nishio does not explicitly disclose providing separately a video signal and audio signal for separate wireless transmission of the requested data. However, Robbins discloses transmission of analog and digital data over separate channels. For instance, digital audio channel 33 is for transmitting digital audio information along with digital data, while channel 32 is for transmitting analog video/audio and/or information data. Robbins further discloses that transmission the data over a network 22 which may be a wireless cable comprising microwave antennas receivers (see col. 4, lines 4-6, 17-20, or 53-55; col. 3, lines 22-26). Therefore, it would have been obvious to one of ordinary skill in the art to modify the system of Nishio by

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providing separately digital audio information with digital data and analog video/audio and/or information data over channels via a wireless network as disclosed by Robbins in order to order to allow subscriber selectively tunes to channels for listening audio/music and view video/information corresponding to the selection.

Robbins further discloses a receiver for receiving music and video program over separate channels (see col. 4, lines 17-20 and col. 12, lines 25-30 and figure 29).

Both Nishio and Robbins do not explicitly disclose the terminal means is mobile. However, Jackson discloses a system for "on demand" distribution of digital data such as songs or video games comprising a portable digital cellular device which includes a liquid crystal display window which allows a user to select a desired song to be heard or game to be played (see abstract). Therefore, it would have been obvious to one of ordinary skill in the art to modify the system of Nishio and Robbins by including a portable digital cellular device in a system for on demand distribution of songs or games in order to allow the subscriber to selectively play the song or game at any where and easily to carry the device.

Regarding **claim 2**, the combination teach of Nishio and Robbins teaches that a base station for separate wireless transmission of the video and audio data (interface 30 of service node 110 in Nishio's system and headend 16 in Robbins's system – see figure 1 in Nishio reference and figure 1 in Robbins reference).

Regarding **claim 3**, the combination teaching of Nishio and Robbins teaches that the base station is a portion of the exchange means which is remote from a remainder of the exchange means (the interface 30 of the service node 110 is remote from interface 32 of the service node 110 – see figure 1 in Nishio reference and figure 1 in Robbins reference).

Regarding **claim 4**, Nishio discloses the exchange means includes ATM (see col. 3, lines 35-37).

Regarding **claim 5**, the combination teaching of Nishio and Robbins teaches that the server means include a video server and an audio server (see figure 1 in Nishio reference and col. 3, lines 36-39 in Robbins reference).

Regarding **claim 6**, Nishio discloses the server manager communicates with a PSTN for remote access thereto (see col. 2, lines 61-64).

Regarding **claim 7**, the combination teachings of Nishio, Robbins and Jackson further teach that the terminal means (see Robbins: col. 12, lines 25-48; col. 9, lines 5-8, 22-27 and figure 29) comprises:

- a first and second tuners (120 and 202) for detecting the video signal and the audio signal, respectively, from the exchange means;

- a signal processing means (122 and 192) for detecting the video signal and audio signal of the data selected by the user, from a plurality of video signals and audio signals received through the first and second tuners;

- first and second decoders (132 and 172) for decoding the video and audio signals detected by the signal processing means (122 and 192), respectively;

- a video display (144) for outputting the decoded video signal of the data selected by the user, and

- an audio output device (116) for outputting the associated decoded audio signal of the data selected by the user.

Regarding **claims 8 and 9**, Nishio as modified by Robbins further shows the format of the digital data stream comprising header and data groups, wherein the header consists of a run-in-stream, a framing stream, a tag stream and a song ID stream (see figures 4-5).

Regarding **claim 10**, Nishio as modified by Robbins further discloses reading the ID field of the received audio signals from the first and second tuners to detect video signal and audio

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signal of the data selected by the user for decoding by the first and second decoders (see Robbins: col. 6, line 66 to col. 7, line 3).

Regarding claims **11-13**, the combination teaching of Nishio and Robbins teaches providing video/audio requested by the user (see Robbins: col. 3, lines 34-36; Nishio: col. 2, lines 51-61).

Regarding **claim 14**, Nishio as modified by Robbins further disclose a digital signal processor (192) (see figures 29-30).

Regarding claims **15-20**, the combination teachings of Nishio, Robbins and Jackson disclose transmitting a request for data, e.g., game/video/song/music from the portable digital cellular device to a provider through a wireless communication, e.g., microwave, and a frequency of the data request transmitted by the terminal means to the exchange means is different than a frequency of the video signal and a frequency of the audio signal transmitted by the exchange means to the terminal means (see Nishio, Jackson: abstract and Robbins: col. 3, lines 22-29; col. 3, line 59 to col. 4, line 1).

Conclusion

5. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

Robbins et al. (US 5,796,423 A) disclose a system to integrating digital audio and analog video to provide seamless user transparent features.

Schubin et al. (US 3,936,594 A) disclose a secure system for television transmission wherein a television signal is transmitted on one frequency channel and a composite high fidelity stereophonic audio signal is transmitted on a separate unrelated frequency channel.

Bennett (US 5,068,733 A) discloses multiple access television.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Ngoc K. Vu whose telephone number is 703-306-5976. The examiner can normally be reached on Monday-Thursday.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Christopher Grant can be reached on 703-305-4755. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

A handwritten signature in black ink, appearing to read 'Ngoc K. Vu', with a long horizontal flourish extending to the right.

Ngoc K. Vu
Examiner
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September 3, 2004